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REMARKS

This Amendment is in response to the Office Action mailed on September 9, 2005 in which claims 1 and 10 were rejected and claims 2-9 and 11-18 were objected to. The Examiner's indication of allowable subject matter in claims 2-9 and 11-18 is greatly appreciated. Additionally, independent claims 1 and 10 are presented for reconsideration in view of the following remarks. Favorable action with regard to independent claims 1 and 10 is respectfully requested.

In section 2 of the Office Action, claims 1 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Christiansen et al. (U.S. Patent No. 6,369,969) in view of Garza (U.S. Patent No. 5,739,969). In the Office Action, Garza was cited as teaching the concept of reading for a predetermined time using a counter. Christiansen et al. was cited as teaching most limitations of independent claims 1 and 10.

Independent claim 1 is directed to a method which includes performing a transducer polarity detection routine. The transducer polarity detection routine includes the steps of setting a read gate period duration to a first value and searching for a good address mark signal during a first read gate period with a channel polarity set to a first polarity. The transducer polarity detection routine steps also comprise "identifying a polarity of a transducer based upon the channel polarity when the good address mark is detected." (emphasis added). Independent claim 10 is directed to an apparatus including a transducer and a channel coupled to the transducer. The apparatus also includes circuitry coupled to the channel and configured to perform a transducer polarity detection routine which includes steps substantially the same as those recited in independent claim 1. It is respectfully submitted that Christiansen et al. do not teach or suggest the step of identifying a polarity of a transducer based upon the channel polarity when the good address mark is detected, which is required in both independent claims.

At column 3, lines 4-11, Christiansen et al. disclose a sync mark detector 24 "which detects the sync mark pattern in the read signal 22." As recited in this portion of Christiansen et al.: "when the sync mark pattern is detected, the sync mark detector 24 generates a sync mark detect signal 26 and a polarity signal 28. The polarity signal 28 is indicative of a polarity of the bias layer." At column 3, line 27 through column 4, line 39, Christiansen et al. describe circuitry and methods in which the polarity signal is generated from the sync mark pattern. In one disclosed embodiment, the polarity signal 28 described by Christiansen et al. is "generated relative to which correlated signal

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58 or 64 exceeds the threshold 68." See Christiansen et al. at column 4, lines 7-10. An alternate embodiment is described by Christiansen et al. at column 4, lines 11-39. In each of these embodiments, the determination of the polarity of the transducer is not based upon the channel polarity when the good address mark is detected as is required in the independent claims of the present application. Instead, in each of these embodiments, the transducer polarity is identified based upon the values of the bits in the sync mark pattern. For example, see Christiansen et al. at column 3, lines 54-65 (describing generation of correlated signals 58 and 64); column 4, lines 7-10 (describing determination of polarity based upon the correlated signals 58 and 64); and column 4, lines 35-39 (describing generation of the polarity signal using a latch which latches a bit of the sync mark).

Consequently, in view of the above discussion, it is clear that Christiansen et al. identify a polarity of a transducer based upon the sync mark pattern contents, and not based upon the channel polarity when a good address mark is detected. Consequently, lacking a teaching or suggestion of this expressly recited limitation of independent claims 1 and 10, it is respectfully submitted that these independent claims are also in condition for allowance. Reconsideration and allowance of independent claims 1 and 10 are therefore respectfully requested along with objected to claims 2-9 and 11-18.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to deposit account No. 23-1123.

Respectfully submitted,

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